Amendment and Response to Office Action

Serial Number: 10/009,036

Filing Date: 9/30/02

Title: Cell Therapy for Chronic Stroke

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1. (Presently Amended) A method of treating stroke in a patient who has undergone a stroke at least three hours earlier, said method comprising delivering at least 2 million viable neuronal cells to at least one brain area involved in the stroke whether hemorrhagic or ischemic.

- 2. (Presently Amended) The method of claim 1 further comprising the step of using a twist drill or a burr to provide entry through the skull whereby through which the cells can be delivered into the brain.
- 3. (Presently Amended) The method of claim 1 wherein the cells are selected from the group consisting of hNT neuronal cells, neural stem cells, HCN-1 cells, fetal [[pig]] <u>non-human mammalian</u> cells, neural crest cells or a combination thereof.
- 4. (Original) The method of claim 1 wherein the stroke has taken place at least three months earlier.

Claims 5-6 (cancelled)

- 7. (Presently Amended) A method of improving speech in a person who has experienced brain damage which interferes with speech, said method comprising injecting a sterile composition of a sufficient number of neuronal cells into the damaged <u>brain</u> area.
- 8. (Original) The method of claim 7, wherein the brain damage is due to stroke.
- 9. (Original) The method of claim 7, wherein the injected neuronal cells are human neuronal cells or human stem cells.
- 10. (Presently Amended) A method of improving motor performance in a person who has experienced brain damage which interferes with movement, said method comprising injecting a sterile composition of a sufficient number of neuronal cells to the damaged area of the brain.
- 11. (Original) The method of claim 10, wherein the brain damage is due to stroke.
- 12. (Presently Amended) The method of claim 10, wherein the injected neuronal cells are <u>a</u> sterile composition of human neuronal cells or neural stem cells.
- 13. (Original) A method of improving cognition in a person who has experienced brain damage which interferes with cognition, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells to the damaged area of the brain.

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14. (Presently Amended) A method of improving sensory function in a person who has experienced brain damage which interferes with sensation, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells to the damaged area of the central nervous system or to the cerebral spinal fluid.

- 15. (Presently Amended) A method of improving sensory, motor or cognitive function in a person who has experienced brain damage <u>due to a hemorrhagic or thrombotic stroke</u> which interferes with those functions, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells <u>into</u> a location from which the neuronal cells migrate to the damaged area.
- 16. (Presently Amended) The method of claim 14, comprising delivering the composition <u>into</u> [[to]] the cisternae.
- 17. (Presently amended) A method of replacing in an <u>individual</u>'s <u>individual</u> nervous system nerves lost to neurodegenerative disease, trauma, ischemia or poisoning, the method comprising administering to the individual a sterile composition of a sufficient number of neuronal cells.
- 18. (New) The method of claim 17 wherein the cells are selected from the group consisting of hNT neuronal cells, neural stem cells, HCN-1 cells, fetal non-human mammalian cells, neural crest cells or a combination thereof.
- 19. (New) The method of claim 15 wherein the cells are selected from the group consisting of hNT neuronal cells, neural stem cells, HCN-1 cells, fetal non-human mammalian cells, neural crest cells or a combination thereof.